

#17
J.D.
4/1/02



PATENT APPLICATION
Attorney Docket No. Q50373

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE
BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES**

In re application of

PATEL, CHANDRAKANT B., et al.

Appln. No.: 09/078,555

Group Art Unit: 2683

Confirmation No.: 7386

Examiner: C. TRAN

Filed: May 14, 1998

For: RADIO RECEIVERS FOR RECEIVING BOTH VSB AND
QAM DIGITAL TELEVISION SIGNALS

RECEIVED
APR 11 2002
Technology Center 2600

REPLY BRIEF PURSUANT TO 37 C.F.R. § 1.193(b)

Commissioner for Patents
Washington, D.C. 20231

Sir:

In accordance with the provisions of 37 C.F.R. § 1.193(b), Appellant respectfully submits this Reply Brief to address points raised in the Examiner's Answer of February 7, 2002. Entry of this Reply Brief is respectfully requested.

POINTS RAISED IN EXAMINER'S ANSWER

Claims 23-40 are pending in the application. Each of these claims stands rejected under 35 U.S.C. § 112, first paragraph, as allegedly containing subject matter which was not described in the specification in such a way as to reasonably convey the one skilled in the relevant art that the inventor, at the time the application was filed, had possession of the claimed invention. In the Office Action dated April 2, 2001, claims 23 and 26-40 were rejected under 35

**APPELLANTS' REPLY BRIEF
PURSUANT TO 37 C.F.R. § 1.193(b)
U.S. Appln. No. 09/078,555**

U.S.C. § 102(e) as being anticipated by Nielsen (U.S. Patent 5,684,827). However, in the Examiner's Answer, in Section 10, entitled "Grounds of Rejection", only ground of rejection is that of claims 23-40 under 35 U.S.C. § 112. Appellant assumes, therefore, that the rejection of claims 23 and 26-40 under 35 U.S.C. § 102(e) has been withdrawn.

Turning to the rejection of claims 23-40 under 35 U.S.C. § 112, first paragraph, in the Office Action dated April 2, 2001, the Examiner stated that "the method of controlling the operation mode of an equalizer added in response to the identification of DC components of the received signal added in specification and claims raise new subject matters and issues." See Paper No. 11, page 3, numbered paragraph 3.

In the Appeal Brief, Appellants submitted arguments that each of the elements of the claims is supported in the specification as originally filed on June 28, 1994. Appellant also submitted with the Appeal Brief a chart specifically showing examples of where each claimed element was supported in the specification as originally filed. In response to the arguments presented in the Appeal Brief, the Examiner's Answer includes the following:

In response to Applicants' argument that the feature upon which Applicants rely "i.e., steps of identifying a DC component, controlling the operation mode ... etc." were not recited in the parent application, and these features have been added as new subject matters (on pre-amendment page 2-4) in new case as **continuation-in-part**, filed on July 17, 1998. Furthermore, the cited portion of the specification do not deal with DC offset correction, and thus, the claims are merely entitled to the July 17, 1998 filing date.

In response, Appellants submit the following comments.

**APPELLANTS' REPLY BRIEF
PURSUANT TO 37 C.F.R. § 1.193(b)
U.S. Appln. No. 09/078,555**

First, the present application was filed on May 14, 1998. Appellant therefore submits that the Examiner has made an error in referring to the filing date as July 17, 1998.

Second, the statement, "Furthermore recited portion of the specification do not deal with DC offset correction, and thus, the claims are merely entitled to the July 17, 1998 filing date", is not understood. More specifically, the relevance of whether or not the specification deals with DC offset correction is not understood. The claims do not relate to DC offset correction and no arguments were made with respect to DC offset correction. Rather, the claimed invention relates to determining whether a received signal has a DC component and controlling the operating mode of an equalizer in response to whether a DC component is detected. DC offset correction is not a feature of the invention.

Third, the Examiner states that the features upon which Applicants rely (i.e., steps of identifying a DC component, controlling the operation mode... etc.), were not recited in the parent application. Appellant respectfully disagrees with this statement. For example, claim 23 is directed to a method of controlling the operating mode of an equalizer. The method has two steps: 1) identifying a direct current (DC) component of a received signal, and 2) controlling the operating mode of the equalizer in response to the identification of the direct current (DC) component of said received signal.

With respect to the first step (i.e., identifying a direct component of a received signal), Appellants submit that this feature is clearly disclosed in the specification of the parent application. The VSB pilot carrier presence detector 34 is clearly described as detecting the

**APPELLANTS' REPLY BRIEF
PURSUANT TO 37 C.F.R. § 1.193(b)
U.S. Appln. No. 09/078,555**

presence of a VSB pilot carrier when a DC component is detected. For example, see page 13, lines 13-25, where it is explained that detector 34 detects the zero-frequency term (that is, the DC component) of the real samples from the VSB synchronodyne circuitry 29, and that the DC component being essentially zero indicates the absence of a pilot carrier signal that accompanies a VSB signal, and that when the DC component has substantial energy, it indicates the presence of a pilot carrier signal that accompanies a VSB signal. Descriptions of the VSB pilot carrier presence detector 34 detecting a DC component appear at other locations of the specification, for example, at page 15, lines 1-13. Thus, it is not understood why the Examiner states that the step of identifying a DC component was not recited in the parent application.

With respect to the second step of claim 23 (that is, controlling the operating mode of the equalizer in response to the identification of the direct current (DC) component of said received signal), Appellants note that at page 17, lines 25+, of the specification as originally filed, there is an explanation that the amplitude-and-group-delay equalizer 36 is arranged to provide a flat amplitude-versus-frequency characteristic in response to the VSB pilot carrier presence detector 34 indicating the absence of a pilot carrier. That is, when the element 34 does not detect a DC component, the equalizer 36 is configured to provide a characteristic response. Thus, the operating mode of the equalizer is controlled in response to the identification of the DC component of the received signal. Thus, the statement in Section 11 of the Examiner's Answer that the feature of controlling the operation mode... was not recited in the parent application is not understood.

**APPELLANTS' REPLY BRIEF
PURSUANT TO 37 C.F.R. § 1.193(b)
U.S. Appln. No. 09/078,555**

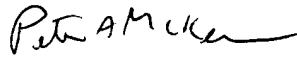
Furthermore, Appellant believes that each of the features of claims 24-40 are also clearly described in the specification of the parent application. Rather than list the specific portions of parent application which support each of the claimed features, attention is directed to Appellants Appeal Brief, as well a to the chart accompanying Appellant's Appeal Brief which specifies such support.

Because each of the elements of the claims are clearly described in the parent application, Appellant requests that the Board reverse the rejections of claims 23-40 under 35 U.S.C. § 112, first paragraph.

CONCLUSION

For the above reasons as well as the reasons set forth in Appellants' Brief on Appeal, Appellants respectfully request that the Board reverse the Examiner's rejections of all claims on Appeal. An early and favorable decision on the merits of this Appeal is respectfully requested.

Respectfully submitted,



Peter A. McKenna
Registration No. 38,551

SUGHRUE MION, PLLC
2100 Pennsylvania Avenue, N.W.
Washington, D.C. 20037-3213
Telephone: (202) 293-7060
Facsimile: (202) 293-7860

Date: April 8, 2002